

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington DC 20544**

In the Matter of :)	
)	
Amendment of Part 97 of the Commission's Rules)	RM-11306
Governing the Amateur Radio Service)	

Petition Proposes Amateur Band Segmentation By Bandwidth Maxima

INTRODUCTION

The National Association for Amateur Radio (ARRL) is proposing rule changes, which would comprehensively modify the means by which the extremely varied emission modes in the Amateur Radio Service are developed, experimented with, implemented, and regularly utilized in the course of normal Amateur Radio Communications. In effect, the ARRL's petition proposes Amateur band segmentation not by emission types as currently done, but by bandwidth maxima.

MY RESPONSE:

As more and more digital-type modes and techniques are introduced into the Amateur Service, the lines between them and traditional analog modes are becoming blurred. As in digital voice, it's difficult to ascertain whether the transmission should be considered voice or data, since the actual transmitted signal is a stream of data. By providing a bandwidth based plan, many of these blurred lines between analog and digital type transmissions will be alleviated. However, strong band planning with a broad participation and input from the amateur community would have to be developed in order for a bandwidth based plan to succeed and to prevent or minimize interference

between incompatible modes trying to operate adjacent to each other. The ARRL petition defines the bandwidth in terms of “necessary bandwidth” rather than “occupied bandwidth”. In a practical perspective, this is very good since the measurement of the amateur’s actual signal bandwidth would not be required. Many amateurs probably don’t possess the necessary test equipment to do so anyway.

The ARRL petition states that it would permit semi-automatic digital stations throughout the HF bands. Currently, a number of automatically controlled digital stations have been accommodated as authorized by Section 97.221. As authorized by Section 97.221, these stations only occupy very small segments of each band. ARRL and others have made claim that relatively few stations are making use of these semi-automatic stations. My understanding is that these semi-automatic stations also do not “listen before transmitting”. If the number of semi-automatic stations increase, and are allowed to operate anywhere within the HF bands, unintentional interference with stations that cannot be heard by the controlling station will be greatly increased. I strongly object to allowing these semi-automatic digital stations full access to the HF bands. The provisions currently stated in Section 97.221 should be retained.

Under the ARRL’s petition, Independent Sideband (ISB) could no longer be used below 29 MHz. Under the current FCC rules, Section 97.207, ISB is permitted in HF phone bands. I see no reason why this mode should be eliminated even though the ARRL claims that it hasn’t been used for many years. It is a valid mode and should be retained and amateurs should be free to experiment and use the mode if they were so inclined.

ARRL’s petition calls for a maximum of 3.5 KHz for phone operation and includes a Note exemption in Section 97.307 (Note 1) which says that the 3.5 KHz maximum bandwidth does not apply to double-sideband amplitude modulation phone A3E emissions which are limited to bandwidths of up to 9 KHz. Since the proposal is bandwidth based, adding a mode exemption does not make any sense.

As mentioned in a previous paragraph, deleting a mode that’s perceive not to be used or adding an exemption for a specific mode can stifle any flexibility to experiment with modes greater than 3.5 KHz. I propose a modification to the ARRL’s petition for Section 97.305, Authorized emission types, and Section 97.307, Emission standards. Simply stated, for all HF bands that presently have a 3.5 KHz maximum bandwidth, I propose a 9KHz maximum bandwidth.

The following example only shows those areas of the Section's 97.305 and 97.307 that I believe need to be changed in the ARRL petition. I am in full agreement with the rest of the data that the ARRL has proposed in these Sections.

97.305 Authorized emission types

(e) Except as otherwise provided in this Section, a station may transmit any emission on any frequency authorized to the control operator, consistent with "good operating procedures" and accepted band plans and subject to the following bandwidth limitations:

Wavelength band	Frequencies authorized	Maximum bandwidth	Standards See 97.307(f) paragraph:
			Note: ARRL's Note (1), exception for DSB AM is no longer necessary
160 m	Entire band	9 KHz	
75 m	3.620-4.000 MHz	9 KHz	
40 m	7.100-7.300 MHz	9 KHz	
20 m	14.100-14.350 Mhz	9 KHz	
17 m	18.110-18.168 MHz	9 KHz	
15 m	21.150-21.450 MHz	9 KHz	
12 m	24.930-24.990 MHz	9 KHz	
10 m	28.120-29.000 MHz	9 KHz	

Section 97.307(f) in the ARRL petition, Note 1 should be deleted. Other Notes would have to be renumbered and corrected in Section 97.305.

Given the vast impact of this petition on all amateurs, strong band plans are a necessity. However, developing band plans behind closed doors will not make this petition work. The FCC should expect, and encourage, the ARRL to develop sound band plans that have input from all areas of amateur radio interests. Even though band plans are voluntary, the FCC should emphasize that it expects all amateurs to comply with them in most situations. The ARRL's, Amateur Auxiliary Group, also should be fully trained and

certified to be fully knowledgeable as new modes and bandwidths find active use on the amateur bands to be the 1st line of defense in identifying possible interference issues. A periodic re-certification process of the Amateur Auxiliary Group should be put in place by the ARRL. The Amateur Auxiliary Group, to be viable and effective under this new bandwidth plan, must avoid the appearance of enforcement. Its members must also avoid having any vested interest in any specific type of amateur operations or being sympathetic to any amateur groups that advocate specific activities or causes.

MY RECOMMENDATION

In the previous paragraphs I have indicated what I believe needs to be changed within the ARRL petition. Other than the changes or comments that I have indicated, I am in agreement with this petition. I firmly believe that this petition can be made to work and provide a future for the Amateur Radio Service. By providing a bandwidth based design, we can continue to provide band space for existing “traditional” modes, while at the same time, provide an area for amateurs to experiment and cultivate new modes. The Amateur Radio Service remained in the forefront of technology in the 20th century, and under the ARRL plan, we can continue to be in the forefront of technology throughout the 21st century.

Sincerely

Peter A. Markavage, WA2CWA